## Bombay Hook National Wildlife Refuge 2591 Whitehall Neck Road Smyrna, DE 19977 302-653-9345





## Calendar of Events – 2016

The Wildlife Drive is open daily from ½ hour before sunrise to ½ hour after sunset. The Visitor Center is open during the week from 8:00 am to 4:00 pm. The Visitor Center is open on weekends from 9:00 am to 5:00 pm.

**Sunday, September 25, 2016** 11:00 a.m. – 12:30 p.m. Tour of the Refuge - Join volunteer, Ray Cullom, for a tour of the Refuge. Find out how the Refuge is managed for wildlife, visit different habitats, and walk a trail. Meet at the Visitor Center.

**Sunday, September 25, 2016** 1:30 p.m. – 3:00 p.m. Tour of the Refuge - Join volunteer, Ray Cullom, for a tour of the Refuge. Find out how the Refuge is managed for wildlife, visit different habitats, and walk a trail. Meet at the Visitor Center.

Saturday, October 1, 2016 10:00 a.m. – 12:30 p.m. Environmental Education Workshop This hands-on workshop will help people understand, and experience, the environmental education field trips that can take place at Bombay Hook. You will learn about the Refuge's habitats, explore the tidal salt marsh, dip net in the brackish and fresh water, identify birds, explore the forest, and learn about wildlife management techniques. This is an excellent opportunity for teachers, scout leaders, Refuge volunteers, and interested visitors to get outside and explore the refuge. Call or email to register: tina\_watson@fws.gov or 302-653-9345.



Saturday, October 1, 2016 1:00 pm – 2:00 pm Flight of the Butterflies – BLU-RAY It's a natural history epic. It's a compelling detective story. It's a scientific adventure at its best. It took Dr. Fred Urquhart almost 40 years to discover the monarch butterflies' secret hideaway and prove the most incredible migration on Earth. Following the year-long annual migration cycle of the butterflies, the award-winning production team filmed hundreds of millions of monarchs in their remote overwintering sanctuaries in Mexico in 2011 and again in 2012 and also along their

migratory routes from Canada, across the U.S. and into Mexico. The 40 minute film immerses you in the astounding migration experience as two generations of the butterflies migrate north and then a Super Generation miraculously finds its way from Canada to a few isolated mountaintops in Mexico – to a place it has never been!



Saturday, October 8, 2016 10:00 a.m. – 11:30 a.m. Managing the Landscape for Monarch Butterflies and other Pollinators Join Jim White, from the Delaware Nature Society, as he discusses the many ways that we can help maintain Monarch and other pollinator populations in our yard and natural areas. In recent years many of our most familiar insects such as the Monarch Butterfly have suffered population declines due to human caused changes to the landscape. Modern large scale agricultural practices and residential and commercial

development often drastically reduce the diversity of plants that these insects need to survive. In addition, the overuse of pesticides can also negatively affect our native insects. However it is not too late to stop or even reverse this trend. The program will be in the auditorium with a short walk in the meadow after the talk.

**Sunday, October 9, 2016 FREE ENTRANCE FEE** Celebrate National Wildlife Refuge Week! The Refuge is open from ½ hour before sunrise to ½ hour after sunset. Visitors can tour the 12-mile wildlife drive, explore the 5 walking trails, and look at the exhibits in the Visitor Center.



Sunday, October 9, 2016 11:00 am – 12:00 noon Flight of the Butterflies – BLU-RAY It's a natural history epic. It's a compelling detective story. It's a scientific adventure at its best. It took Dr. Fred Urquhart almost 40 years to discover the monarch butterflies' secret hideaway and prove the most incredible migration on Earth. Following the year-long annual migration cycle of the butterflies, the award-winning production team filmed hundreds of millions of monarchs in their remote overwintering sanctuaries in Mexico in 2011 and again in 2012 and

also along their migratory routes from Canada, across the U.S. and into Mexico. The 40 minute film immerses you in the astounding migration experience as two generations of the butterflies migrate north and then a Super Generation miraculously finds its way from Canada to a few isolated mountaintops in Mexico – to a place it has never been!

Saturday, October 15, 2016 9:00 am to 12:00 noon Highway Clean Up – Volunteer to help clean up the roads leading to Bombay Hook. Meet at the Visitor Center. Wear shoes that can get wet and bring work gloves. Refreshments will be served after the clean-up.



Saturday, October 15, 2016 9:30 am to 11:30 am Jr. Rangers Learn Why Leaves Turn Color New and returning children from 7-11 years old are welcome to attend the Jr. Ranger program. Discover different type of trees and how they prepare for their winter rest. Learn how people and different animals use trees, and what role they plan in the forest ecosystem. Call or email to register: tina\_watson@fws.gov or 302-653-9345.

Saturday, October 15, 2016 1:00 pm to 2:00 pm Live Birds of Prey – Animal Behavior & Conservation Connections The program will present live birds of prey species that live locally or migrate through the region. Experience these raptors up close and in person. Learn about the uniqueness of this group of birds and why they have been admired for centuries. Participants will come eye to eye with a Red-tailed hawk, Red-shouldered hawk, Broad-winged hawk, Merlin, screech owl and Turkey vulture. Expert trainer and educator Phung Luu and team will be on hand with the birds to answer your questions.

**Saturday, October 15, 2016 2:30 pm to 4:00 pm Beginning Birding: Birds of the Backyard** Birds are a joy to watch, especially if you don't have to go far to enjoy and study them. Backyard birding is a popular activity for families. You will learn identification skills, bird feeding tips, and how to participate in citizen science projects right from your home and backyard.



Sunday, October 16, 2016 11:00 am – 12:00 noon Flight of the Butterflies – BLU\_RAY It's a natural history epic. It's a compelling detective story. It's a scientific adventure at its best. It took Dr. Fred Urquhart almost 40 years to discover the monarch butterflies' secret hideaway and prove the most incredible migration on Earth. Following the year-long annual migration cycle of the butterflies, the award-winning production team filmed hundreds of millions of monarchs in their remote overwintering sanctuaries in Mexico in 2011 and again in 2012 and

also along their migratory routes from Canada, across the U.S. and into Mexico. The 40 minute film immerses you in the astounding migration experience as two generations of the butterflies migrate north and then a Super Generation miraculously finds its way from Canada to a few isolated mountaintops in Mexico – to a place it has never been!

Tuesday, October 18, 2016 9:00 am to 2:00 pm Toddlers/preschoolers (1 year old to 5 years old) and their family is free. Bombay Hook will be free for toddlers and their families on the 3<sup>rd</sup> Tuesday of October. Children from 1 to 5 years old are developing cognitive skills and being in nature can expose them to sights and sounds that might go unnoticed in their everyday setting. Take your child on the wildlife drive, walk a trail, climb up a tower, and look at wildlife exhibits in the visitor center. You are never too young to explore and learn. This is a self-study activity for families. You can come anytime between 9:00 a.m. and 2:00 p.m.

Saturday, October 22, 2016 10:00 am to 2:30 pm Annual Native Plant Symposium – Native Plants in Wildlife Habitats Native plants are essential in habitats for pollinators, birds and other wildlife that provide an ecosystem with food, water, cover and shelter. We will be viewing the Meadow Project's "Hometown Habitat, Stories of Bringing Nature Home" – a documentary focused on showing how and why native plants are critical to the survival and vitality of local ecosystems. "Hometown Habitat" features entomologist Dr. Douglas Tallamy, whose research, books and lectures on the use of non-native plants in landscaping, sound the alarm about habitat and species loss. The message: All of us have the power to support habitat for wildlife and bring natural beauty to our patch of the earth. Building on the documentary will be: Alice Mohrman of the Delaware Nature Society, a state affiliate of the National Wildlife Federation (NWF), who will present "Gardening for Wildlife and Water" – landscaping your outdoor space with Delaware native plants, to attract birds and butterflies and support local water quality, exploring sustainable practices, and establishing a NWF Certified Wildlife Habitat; and a presentation about the Habitat Network (formerly YardMap), a citizen science project and tremendous resource under the Cornell Lab of Ornithology and The Nature Conservancy. The symposium is free, but registration is required and space is limited; contact Eric Wahl at <a href="EWahl@elementdg.com">EWahl@elementdg.com</a> or (302) 645-0777. Lunch will be provided.

**Sunday, October 23, 2016** 11:00 a.m. – 12:30 p.m. Tour of the Refuge - Join volunteer, Ray Cullom, for a tour of the Refuge. Find out how the Refuge is managed for wildlife, visit different habitats, and walk a trail. Meet at the Visitor Center.

**Sunday, October 23, 2016** 1:30 p.m. – 3:00 p.m. Tour of the Refuge - Join volunteer, Ray Cullom, for a tour of the Refuge. Find out how the Refuge is managed for wildlife, visit different habitats, and walk a trail. Meet at the Visitor Center.

**Sunday, October 23, 2016 12:00 noon to 5:00 pm Bird Identification Station** Get a close look at the different bird species in the impoundments. Randy Murphy will be set up on the wildlife drive with scopes and binoculars to help you identify waterfowl, passing raptors, and whatever else flies by. Look for the blue ID Station sign along the auto tour route.

Saturday, October 29, 2016 10:00 am to 12:30 pm Tour and Explore the Refuge We will explore the Refuge: walk a trail, learn about the history of the refuge, discuss wildlife management techniques, and identify the birds along the wildlife drive. Space is limited. Call or email to register: tina\_watson@fws.gov or 302-653-9345.



Saturday, October 29, 2016 1:00 pm – 2:00 pm Flight of the Butterflies – BLU\_RAY It's a natural history epic. It's a compelling detective story. It's a scientific adventure at its best. It took Dr. Fred Urquhart almost 40 years to discover the monarch butterflies' secret hideaway and prove the most incredible migration on Earth. Following the year-long annual migration cycle of the butterflies, the award-winning production team filmed hundreds of millions of monarchs in their remote overwintering sanctuaries in Mexico in 2011 and again in 2012 and

also along their migratory routes from Canada, across the U.S. and into Mexico. The 40 minute film immerses you in the astounding migration experience as two generations of the butterflies migrate north and then a Super Generation miraculously finds its way from Canada to a few isolated mountaintops in Mexico – to a place it has never been!

**Sunday, October 30, 2016** 11:00 a.m. – 12:30 p.m. Tour of the Refuge - Join volunteer, Ray Cullom, for a tour of the Refuge. Find out how the Refuge is managed for wildlife, visit different habitats, and walk a trail. Meet at the Visitor Center.

**Sunday, October 30, 2016** 1:30 p.m. – 3:00 p.m. Tour of the Refuge - Join volunteer, Ray Cullom, for a tour of the Refuge. Find out how the Refuge is managed for wildlife, visit different habitats, and walk a trail. Meet at the Visitor Center.

Saturday, November 5, 2016 9:00 am to 11:00 am Exploring the Bluebird Box Trail The program will cover the plight of the Eastern Bluebird and how conservation activities can benefit the species. The group will walk a 1-1/2 mile section of the refuge, exploring the bluebird nest boxes and the different kinds of wildlife that use them. The program is a hands-on experience for both youth and adults. Bring a bag lunch and picnic at the Visitors Center pavilion after the program.

Friday - Sunday, November 11, 12, & 13, 2016 - ½ hour before Sunrise to ½ hour after Sunset FREE ENTRANCE FEE for Veteran's Weekend. Honoring veterans, the National Wildlife Refuge System is providing free entrance to Bombay Hook National Wildlife and all the refuges throughout the U.S. This is a good time of year to see hawks, eagles, ducks, and geese. Take time out to remember our veterans and to enjoy nature.

Saturday, November 12, 2016 9:30 am to 11:30 am Winter Waterfowl Identification Workshop is a joint program with the Delaware Museum of Natural History (DMNH) and the Delmarva Ornithological Society (DOS). The program will offer participants the opportunity to examine closely, study and discuss the skins of a variety of waterfowl common to Delmarva in the winter. Birds for study will include both the expected and the unusual species. This program will introduce new birders to many commonly seen waterfowl, while offering plumage challenges for our more advanced birders. Dr. Jean Woods, Curator of Birds at the DMNH, will be on hand to guide us through the museum's selected collections.

The workshop is free and will be at the Bombay Hook NWR Visitors' Center. Space is limited and registration is required. (Age 16 and over unless accompanied by a parent) If you're interested in attending the Winter Waterfowl Workshop, please contact Jean Woods, <a href="mailto:jwoods@delmnh.org">jwoods@delmnh.org</a> or 302-658-9111 x314.

Tuesday, November 15, 2016 9:00 am to 2:00 pm Toddlers/preschoolers (1 year old to 5 years old) and their family is free. Bombay Hook will be free for toddlers and their families on the 3<sup>rd</sup> Tuesday of October. Children from 1 to 5 years old are developing cognitive skills and being in nature can expose them to sights and sounds that might go unnoticed in their everyday setting. Take your child on the wildlife drive, walk a trail, climb up a tower, and look at wildlife exhibits in the visitor center. You are never too young to explore and learn. This is a self-study activity for families. You can come anytime between 9:00 a.m. and 2:00 p.m.



Saturday, November 19, 2016 9:30 am to 11:30 am Jr. Rangers Learn About The Eastern Wild Turkey New and returning children from 7-11 years old are welcome to attend the Jr. Ranger program. Did you know that a wild turkey can run up to 25 miles per hour? Learn many interesting facts about wild turkeys, their behaviors, and how and where they live in Delaware. Call or email to register: tina watson@fws.gov or 302-653-9345.

**Saturday, November 19, 2016** 2:00 pm to 4 pm Bike Ride on the Refuge Join Tina Watson for an eight-mile bike ride on the Refuge. The group will make several stops for bird identification and to discuss wildlife management techniques. Bicycle should have hybrid tires. Don't forget your helmet and check the air in your tires! Meet at the Visitor Center. Important- Delaware State law states, "a person under sixteen years of age shall not operate, ride upon, or ride as a passenger any bicycle, unless that person is wearing a properly fitted and fastened bicycle helmet which meets or exceeds the ANSI Z90.4 bicycle helmet standard."

**Sunday, November 20, 2016** 9:30 am to 11:00 am Beginning Bird Watching – Duck, Duck, Goose. What are all those ducks and geese around the Refuge? Come and learn how to tell one duck from another at this beginning birders' class. We'll meet at the Visitor Center at 9:30 am for a talk and then practice our identification skills on the wildlife drive.

**Friday, November 25, 2016** 12:00 noon to 5:00 pm Bird Identification Station Get a close look at the different bird species in the impoundments. Randy Murphy will be set up on the wildlife drive with scopes and binoculars to help you identify waterfowl, passing raptors, and whatever else flies by. Look for the blue ID Station sign along the auto tour route.

Friday, November 25, 2016 1:00 pm to 3:00 pm Tour of the Refuge - We will explore the Refuge and learn about the history of the refuge, how we manage for wildlife, and identify the birds along the wildlife drive. Space is limited. Call or email to register: tina\_watson@fws.gov or 302-653-9345.

Sunday, November 27, 2016 11:00 a.m. – 12:30 p.m. Tour of the Refuge - Join volunteer, Ray Cullom, for a tour of the Refuge. Find out how the Refuge is managed for wildlife, visit different habitats, and walk a trail. Meet at the Visitor Center.

**Sunday, November 27, 2016** 1:30 p.m. – 3:00 p.m. Tour of the Refuge - Join volunteer, Ray Cullom, for a tour of the Refuge. Find out how the Refuge is managed for wildlife, visit different habitats, and walk a trail. Meet at the Visitor Center.

Saturday, December 3, 2016 3:00 pm – 5:00 pm Sunset Tour of the Refuge The tour will begin early enough to make a couple stops along the way. The group will discuss wildlife management practices, bird watch, and will end with the sunset over Shearness Pool. Space is limited. Call or email to register: tina\_watson@fws.gov or 302-653-9345.

**Sunday, December 4, 2016** 12:00 noon to 5:00 pm Bird Identification Station Get a close look at the different bird species in the impoundments. Randy Murphy will be set up on the wildlife drive with scopes and binoculars to help you identify waterfowl, passing raptors, and whatever else flies by. Look for the blue ID Station sign along the auto tour route.



Wednesday, December 28, 2016 9:30 am to 11:30 am Jr. Rangers Learn about FOWL PLAY – Swans, ducks and geese...see how they use the Refuge for their wintering grounds! Identify different species and learn about their food sources.

Bombay Hook National Wildlife Refuge Dates Refuge Closed for Hunting September, 2016 to January, 2017 Season

Back Section of the Refuge Closed Wildlife Drive closed from north end of Shearness to Finis and Allee House.

October 10, 12, and 14, 2016 all day for Muzzleloader November 11, 12, and 16, 2016 all day for Shotgun December 12 & 15, 2016 all day for Shotgun January 16, 2016 all day for Wheelin' Sportsmen Waterfowl Hunt January 20, 2017 all day for Shotgun

Front Section of the Refuge Closed
Wildlife Drive closed from Visitor Center to Shearness Parking Lot.
Enter the Refuge from Dutch Neck Road on Rt. 9 north.

November 14 & 18, 2016 all day for Shotgun December 14, 2016 all day for Shotgun

Closed dates for Young Waterfowler's Hunts unknown at this time.